



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,428	09/16/2003	Randall E. Aull	003797.00621	2075
28319 7590 10/18/2007 BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NOS. 003797 & 013797 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER PHAM, TAMMY T	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/662,428

Applicant(s)

AULL ET AL.

Examiner

Tammy Pham

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 and 23-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-22, 39-44 is/are allowed.
- 6) ☒ Claim(s) 14-16 and 36-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's arguments, see Appeal Brief, filed 5 March 2007, have been fully considered and are persuasive. The Final Rejection of 29 August 2007 has been withdrawn.

#### *Response to Amendment*

2. Claims 1-13, 23-35 have been withdrawn. Claims 14-22, 36-44 are considered below.

#### *Allowable Subject Matter*

3. In view of the Appeal Brief filed 5 March 2007, claims 17-22, 39-44 are allowed.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-16, 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. (thereon referred to as "Baker1") (US Patent No: 5,675,329) in view of Baker et al. (thereon referred to as "Baker2") (US Patent No: 5,299,125).
5. **In regards to independent claims 14, 36, Baker1 teaches of a method of processing data received from a keyboard (Fig. 1, item 11) having a plurality of keys (Fig. 1, part of item 11), the plurality of keys (Id.) including multiple keys (Id.) having respective characters assigned thereto**

(Id.), the plurality of keys (Id.) further including one or more force-sensing keys (column 2, lines 34-38), receiving a keyboard data set (message that is part of Fig. 2; steps 160, 170, 180, where the keyboard is able to communicate data into the system) reporting into the system for multiple keys (Fig. 1, part of item 11) of the plurality pressed by a keyboard user. Baker1 further teaches of detecting the key force data (Fig. 2, step 140) and key identification data (Fig. 2, steps 160, 170; column 3, lines 13-16).

6. Baker1 fails to teach of parsing various keyboard data into an ordered list; and associating various keyboard data based on the orders in which the various data appeared in the keyboard data set.

7. Baker2 teaches of parsing various keyboard data (words, morphemes, or phrases from the keyboard) into an ordered list (column 15, lines 45-53); and associating various keyboard data (words, morphemes, or phrases from the keyboard) based on the orders in which the various data (Id.) appeared in the keyboard data set (column 11, lines 63-2; the claim language remains broad and hence because Baker2 teaches that the parsing device is able to associate various keyboard data entry into a certain order, Baker2 reads upon the claim language as currently claimed).

8. It would have been obvious to one with ordinary skill in the art at the time the invention was made to use the parsing method as taught by Baker2 with the keyboard of Baker1 in order to be able to parse each sequences of input symbols into a correct message output (Baker2: column 6, lines 34-39).

9. **In regards to claims 15, 37,** Baker1 teaches of determining if reported key force data (message that is part of Fig. 2; steps 160, 170, 180, where the keyboard is able to communicate

Art Unit: 2629

data into the system) contains a null indicator (Fig. 2, step 180, column 4, lines 16-19); and associating a null indicator (Id.) with a non-force-sensing key (Id., where the device is able to determine if a new key has been pressed (null indicator) and if a new key has not been pressed (non-force-sensing key)).

10. **In regards to claims 16, 38,** Baker1 fails to teach that a null indicator is a zero value for key force data.

11. Applicant has not disclosed any specific advantage or criticality to having zero as the null indicator. As such, the zero value is an obvious matter of design choice.

12. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have any value, including the claimed zero value, any value would perform equally well as a null indicator.

#### ***Response to Arguments***

13. Applicant's arguments with respect to claims 14-16, 36-38 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2629

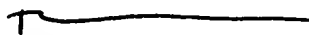
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP  
1 October 2007

  
*Tammy Pham*  
Patent Examiner  
Art Unit 2629

  
SUMATI LEFKOWITZ  
SUPERVISORY PATENT EXAMINER